



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

646.9711

Job Sheet 197311



Part No: 646.9711

Job Qty: 80 pcs

Part Name: Blade



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 7/4/19

Job Tracking No:

Created By: Marie Lajeunesse

Due Date: 10/21/19

Type: Stock

Description:

Note: DWG 646.9700 REV.G IPP REV:A NEW ISSUE 12/09/24 JFS VERIFY BY:DD

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time	
100	Bandsaw - 1	80 pcs	10/21/19	10/21/19	0.00	2.49	Bandsaw - 1		SMML 14/08/20
110	HAAS 4 Axis - B4B	80 pcs	10/21/19	10/21/19	0.13	33.33	HAAS - 1 - B4B		SMML 14/08/20
							HAAS - 2 - B4B		
							HAAS - 3 - B4B		
							HAAS - 4 - B4B		
120	QC 2	80 pcs	10/21/19	10/21/19	0.00	0.00	QC 2 - 1		
							QC 2 - 12		
							QC 2 - 14		
							QC 2 - 17		
							QC 2 - 19		
							QC 2 - 2		
							QC 2 - 20		
							QC 2 - 22		
							QC 2 - 23		
							QC 2 - 25		
							QC 2 - 32		
							QC 2 - 33		
							QC 2 - 35		
							QC 2 - 39		
							QC 2 - 4		
							QC 2 - 40		
							QC 2 - 44		
							QC 2 - 45		
							QC 2 - 48		
							QC 2 - 49		SMML 19/08/20
							QC 2 - 50		
							QC 2 - 51		
							QC 2 - 52		
							QC 2 - 57		
							QC 2 - 62		



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA
TEL.: 1 613 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

Container No: S207308



Part: 646.9711

Job No: 197311

Serial No/Batch: S207308

Revision: G

Inspector:

Exp Date:

Instructions: Various STC's

Date: 08/20/19

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					QC 2 - 63	
					QC 2 - 8	
					QC 2 - 66	
					QC 2 - 64	
					QC 2 - 65	
					QC 2 - 5	
					QC 2 - 71	
					QC 2 - 73	
					QC 2 - 69	
130	QC 8	80 pcs	10/21/19	0.00 0.00	QC 8 - 12	
					QC 8 - 14	ML 19/08/22
					QC 8 - 17	
					QC 8 - 20	
					QC 8 - 25	
					QC 8 - 3	
					QC 8 - 32	
					QC 8 - 33	
					QC 8 - 35	
					QC 8 - 39	
					QC 8 - 4	
					QC 8 - 44	
					QC 8 - 45	
					QC 8 - 49	
					QC 8 - 58	
					QC 8 - 8	
					QC 8 - 9	
					QC 8 - 68	
					QC 8 - 67	
					QC 8 - 1 (A)	
					QC 8 - 47	
					QC 8 - 40	
					QC 8 - 52	
					QC 8 - 23	
					QC 8 - 57	
140	Outsource - 1 - Heat Treat	80 pcs	10/21/19		MEI001-VC	10
						2019-08-26
150	Packaging 2-1 - Receive - B4B	80 pcs	10/21/19	0.00 0.00	Packaging 2 - 1 - B4B	
					Packaging 2 - 2 - B4B	
					Packaging 2 - 3 - B4B	
					Packaging 2 - 5 - B4B	
					Packaging 2 - 4 - B4B	
					Packaging 2 - 6 - B4B	
					Packaging 2 - 7 - B4B	
					Packaging 2 - 8 - B4B	
					Packaging 2 - 9 - B4B	
					Packaging 2 - 10 - B4B	
					Packaging 2 - 11 - B4B	
					Packaging 2 - 12 - B4B	
					Packaging 2 - 13 - B4B	SEP 10 2019
					Packaging 2 - 14 - B4B	
					Packaging 2 - 15 - B4B	
					Packaging 2 - 16 - B4B	
					Packaging 2 - 17 - B4B	

					Packaging 2 - 18 - B4B	
					Packaging 2 - 19 - B4B	
					Packaging 2 - 20 - B4B	
					Packaging 2 - 21 - B4B	
					Packaging 2 - 22 - B4B	
					Packaging 2 - 23 - B4B	
					Packaging 2 - 24 - B4B	
					Packaging 2 - 25 - B4B	
					Packaging 2 - 26 - B4B	
					Packaging 2 - 27 - B4B	
					Packaging 2 - 28 - B4B	
					Packaging 2 - 29 - B4B	
					Packaging 2 - 30 - B4B	
					Packaging 2 - 31 - B4B	
					Packaging 2 - 32 - B4B	
					Packaging 2 - 33 - B4B	
					Packaging 2 - 34 - B4B	
					Packaging 2 - 35 - B4B	
					Packaging 2 - 36 - B4B	
155 QC 6	80 pcs	10/21/19	0.00 0.00	QC 6 - 9		
				QC 6 - 68	DAS	
				QC 6 - 61	61	
				QC 6 - 40	9-89	
160 Spray Paint - 2 - B4B	80 pcs	10/21/19	0.00 2.67	Spray Paint - 1 - B4B		
				Spray Paint - 2 - B4B	RD 19-9-11	
				Spray Paint - 3 - B4B		
				Spray Paint - 4 - B4B		
170 QC 14	80 pcs	10/21/19	0.00 0.00	QC 14 - 15		
				QC 14 - 2		
				QC 14 - 34		
				QC 14 - 41	AD 19-9-12	
				QC 14 - 51		
				QC 14 - 58		
				QC 14 - 59		
				QC 14 - 9		
				QC 14 - 68		
				QC 14 - 40		
				QC 14 - 19		
				QC 14 - 43		
				QC 14 - 24		
				QC 14 - 61		
QC 14 - 81						
185 Packaging 3-1 - Stock - B4B	80 pcs	10/21/19	0.00 0.00	Packaging 3 - 1 - B4B		
				Packaging 3 - 2 - B4B		
					Plex 7/4/19 1:32 PM Dart.lajeunesse.marie	

				Packaging 3 - 3 - B4B		
				Packaging 3 - 4 - B4B		
				Packaging 3 - 5 - B4B		
				Packaging 3 - 6 - B4B		
				Packaging 3 - 7 - B4B		
				Packaging 3 - 8 - B4B		
				Packaging 3 - 9 - B4B		
				Packaging 3 - 10 - B4B		
				Packaging 3 - 11 - B4B		
				Packaging 3 - 12 - B4B		
				Packaging 3 - 13 - B4B		
				Packaging 3 - 14 - B4B		
				Packaging 3 - 15 - B4B		
				Packaging 3 - 16 - B4B		
				Packaging 3 - 17 - B4B		
				Packaging 3 - 18 - B4B		
				Packaging 3 - 19 - B4B		
				Packaging 3 - 20 - B4B		
				Packaging 3 - 21 - B4B		
				Packaging 3 - 22 - B4B	AB 19-9-12	
				Packaging 3 - 23 - B4B		
				Packaging 3 - 24 - B4B		
				Packaging 3 - 25 - B4B		
				Packaging 3 - 26 - B4B		
				Packaging 3 - 27 - B4B		
				Packaging 3 - 28 - B4B		
				Packaging 3 - 29 - B4B		
				Packaging 3 - 30 - B4B		
				Packaging 3 - 31 - B4B		
				Packaging 3 - 32 - B4B		
				Packaging 3 - 33 - B4B		
				Packaging 3 - 34 - B4B		
				Packaging 3 - 35 - B4B		
				Packaging 3 - 36 - B4B		
190	QC 21 - SA	80 pcs	10/21/19	0.00 0.00	QC 21 - SA - 21	SEP 13 2019
					QC 21 - SA - 70	
					QC 21 - SA - 53	

DAS
21
8-AB

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Part Op 100 - (Bandsaw) Cut Blank at 4.625"

Descriptions: 110 - (HAAS CNC Vertical Machine) 1-Machine per folio FB135

120 - (QC2- Inspect parts off machine FAI/FAIB)

130 - (QC8- Inspect parts - second check)

140 - (Outsource process - Heat Treat) PO to Metcor: FINISH: HEAT TREAT TO 58-62 RC ROCKWELL HARDNESS
PART ARE MADE FROM AISI A2 TOOL STEEL PLEASE NOTE: DETAIL C OF C REQUIRED

150 - (Receive & Inspect for Damage & Mat'l Certs)

155 - (QC6- All purchased or subcontracted products)

160 - (Spray Paint / NDT Room) ***THIN COAT OF PRIMER*** PRIME AS PER DWG, SEE NOTE #4 5195271

170 - (QC14- Inspect Spray Paint)

185 - (Identify as per dwg & Stock Location) 66K107

190 - (QC21- Final Inspection - Work Order Release)

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
MSTEEL-A2-B0.500X1.250	AISI A2 Tool Steel Bar, 0.500 X 1.250	30.8800 ft (.386 ea)	100-Bandsaw - 1	5172940 = 13.6 5194043 = 19.4

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
100-Bandsaw - 1	MSTEEL-A2-B0.500X1.250	31	53	0

Part Specifications

Spec No	Description	Target/Tolerance	Limits	Type	Special Comments
1	Blade	0.340Inches + 0.000 - 0.005	0.340 0.335		
2	Blade	0.177Inches + 0.005 - 0.001	0.182 0.176		
3	Blade	3.200Inches ± 0.005	3.205 3.195		
4	Blade	0.600Inches ± 0.005	0.605 0.595		
5	Blade	0.985Inches ± 0.005	0.990 0.980		
6	Blade	2.400Inches ± 0.005	2.405 2.395		
7	Blade	1.200Inches ± 0.005	1.205 1.195		
8	Blade	0.250Inches ± 0.005	0.255 0.245		
9	Blade	37.2Angle ± 0.5	37.7 36.7		
10	Blade	0.290Inches ± 0.010	0.300 0.280		
11	Blade	30.0Angle ± 0.5	30.5 29.5		

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Entered: _____

Date: _____

WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No. _____

Route update only ☐

Job: _____ Part No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Skid-tube ☐ Machining ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Eng. (Non-AW) ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Engineering ☐ Water Jet ☐ Supplier ☐ Quality ☐		DEPARTMENT/PROCESS		MRB (QS1042)	
Date : _____		Sequence #: _____		QTY Affected : _____			
Description Work Order Deviation		Disposition					
Root Cause Operator ☐ Manufacturing Process ☐ Equip/Tooling ☐ Handling/Preservation ☐ Material ☐ Product Improvement ☐ Process Improvement ☐ Human Factors ☐ Pressure/Forced ☐ Bending ☐ Crushing ☐ Cracks ☐ Crimp/Kink/Ripple/Wave/Twist ☐ Marks/Chatter ☐ Mislabeled ☐ Contamination ☐ Misaligned/off center ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Incomplete/Unclear Instructions ☐ Drill Holes ☐ Fit/Function ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain Direction ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set/Set-up ☐ Positioned Wrong ☐ Outside Tolerance ☐ Drawing ☐ Finish ☐ Part Lost/Missing ☐ Misread ☐							
Completed By		Lead hand / Supervisor					
QC / QA Coordinator		Other/Details:					



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER

POHB044347



Supplier: MEI001-VC
Metcor Inc.
560 Boul. Arthur Sauve
Saint-Eustache
QC
J7R 5A8 Canada
Phone: 450 473 1884
Fax: 450 491 5498

Attention: Bejenaru, Livia

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

PO No: POHB044347
PO Date: 8/26/19
Due Date: 9/6/19
Purchase Order Revision:
Revision Date:
Ship-To Contact: Guerin, Kimberley
Phone: 613-632-5200 Ext: 298
kguerin@dartaero.com

Via: Ground
Pymt Terms: Net 30

Freight Terms:
Special Comments:

E-MAILED
2019-08-28

Items

Line Item	Job	Part	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	197835	RB T102137-107-103	Strap (Outsource process - Heat Treat) 1-Issue P/O; Heat treat RC 32-38 2-Bead blast 3-Material type; 4140 4-Certificate of Conformity is required	Firmed	-	9/6/19	16 pcs	0 pcs	16 pcs	\$19.375/pcs	\$310.00
2	197311	646.9711	Blade : Various STC's (Outsource process - Heat Treat) PO to Metcor: FINISH: HEAT TREAT TO 58-62 RC ROCKWELL HARDNESS PART ARE MADE FROM AISI A2 TOOL STEEL PLEASE NOTE: DETAIL C OF C REQUIRED	Firmed	-	9/6/19	80 pcs	0 pcs	80 pcs	\$4.05/pcs	\$324.00

Grand Total: \$634.00



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PURCHASE ORDER
POHB044347



Order Notes

Procurement Quality Clauses

A005 right of entry
A012 chemical and physical test report
A016 personnel qualification
A017 raw material identification (as applicable)

A022 Apical Processing
A024 process certifications
A026 certification of material conformance

A041 quality management system
A042 dart notification by supplier
A043 retention of quality documents

A048 counterfeit parts avoidance, detection, mitigation and disposition program

A049 supplier awareness

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Plex 8/28/19 9:29 AM Dart.Guerin.Kimberley

METCOR INC.

560 BOUL. ARTHUR-SAUVÉ
ST-EUSTACHE, QC J7R 5A8
Tel: 450-473-1884 / Fax: 450-491-5498

Reçu de livraison

Delivery Receipt

BON DE TRAVAIL Order	EXPÉDITEUR Shipper ID	BON D'EXPÉDITION Shipper
338798	1	139643

EXPÉDITION COMPLÈTE / Shipped Complete

CLIENT /Customer 215

DART AEROSPACE
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
Ph: 613-632-5200
Fax: 613-632-1053



LIVRÉ À /Shipped To

DART AEROSPACE
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
Ph: 613-632-5200
Fax: 613-632-1053

COMMANDE DU CLIENT Customer PO	BON DE LIVRAISON DU CLIENT Customer Shipper No.	TYPE DE MATÉRIEL Material Type	DATE DE LA COMMANDE Order Date	TRANSPORTEUR Carrier
HB044347		A2	2019/8/26	client
QUANTITÉ Quantity	No. PIÈCE Part No.	NOM DE LA PIÈCE Part Name	DESCRIPTION DE LA PIÈCE Part Description	POIDS Weight

80 646.9711
(80) 646.9711
JOB 197311

DAS
61
9-89

24,

1 BC EPS

TYPE DE CONTENEUR Container Type	# DE CONTENEURS # Of Containers	COMMENTAIRES CONTENEUR Container Comments
BC EPS	1	

EXPÉDIÉ PAR: Shipped by:	
-----------------------------	--

QUANTITÉ EXPÉDIÉE / Quantity Shipped : 80

POIDS EXPÉDIÉ / Weight Shipped : 24,00

QUANTITÉ RESTANTE / Quantity Remaining : 0

POIDS RESTANT / Weight Remaining : 0,00

RECEIVED

SEP 09 2019

DART AEROSPACE LTD.

APPROUVÉ
[Signature]

Signature:

Date:

QUANTITÉ EXPÉDIÉE /Quantity Shipped:	80
POIDS EXPÉDIÉ / Weight Shipped :	24,00

METCOR INC.

560 BOUL. ARTHUR-SAUVÉ, ST-EUSTACHE, QC, J7R 5A8

Tél.: 450-473-1884

Télécopieur / Fax administration: 450-491-5498

Télécopieur / Fax production: 450 491-6454

Certificat de Conformité Certificate of Compliance

BON DE TRAVAIL order	CHARGEMENT load
338798	1

CLIENT / customer 215

DART AEROSPACE

1270 ABERDEEN

HAWKESBURY

ON K8A 1K7

LIVRÉ À / shipped to:

DART AEROSPACE

1270 ABERDEEN

HAWKESBURY

ON K8A 1K7

1

COMMANDE DU CLIENT customer po	CLASSIFICATION PIECE part classification	MATÉRIEL material	MAÎTRE D'OEUVRE prime contractor	PROGRAM
HB044347	N/A	A2		

SPÉCIFICATIONS DU PROCÉDÉ

processing specifications

VAC HARDEN

HARDEN AND TEMPER

EXIGENCE / requirement	SPÉCIFICATIONS / specified	TESTS EXÉCUTÉS / performed	RÉSULTATS DE TESTS / results
HARDNESS	58 - 62 HRC	5 (907)	59 - 61 HRC

QUANTITÉ quantity	POIDS weight	DESCRIPTION DES PIÈCES parts description
80	24	646.9711 (80) 646.9711 JOB 197311 1 BC EPS

DAS
61
8-89

10/9/19

COMMENTAIRES / comments

APPROUVÉ par / Approved by:



DATE: 2019-08-31

APPROUVÉ

METCOR INC.

560 BOUL. ARTHUR-SAUVÉ, ST-EUSTACHE, QC, J7R 5A8

Tél.: 450-473-1884

Télécopieur / Fax administration: 450-491-5498

Télécopieur / Fax production: 450 491-6454

Certificat de Conformité Détaillé

Detailed Certificate of Compliance

BON DE TRAVAIL order	CHARGEMENT load
338798	1

CLIENT / customer 215

DART AEROSPACE

1270 ABERDEEN

HAWKESBURY

ON K6A 1K7

LIVRÉ À / shipped to:

1

DART AEROSPACE

1270 ABERDEEN

HAWKESBURY

ON K6A 1K7

COMMANDE DU CLIENT customer po	CLASSIFICATION PIECE part classification	MATÉRIEL material	MAÎTRE D'OEUVRE prime contractor	PROGRAM
HB044347	N/A	A2		
SPÉCIFICATIONS DU PROCÉDÉ processing specifications DAS 61 9-89 VAC HARDEN HARDEN AND TEMPER				
EXIGENCE / requirement	SPÉCIFICATIONS / specified		TESTS EXÉCUTÉS / performed	RÉSULTATS DE TESTS / results
HARDNESS	58 - 62 HRC		5	59 - 61 HRC
(907)				
QUANTITÉ quantity	POIDS weight	DESCRIPTION DES PIÈCES parts description		
80	24	646.9711 (80) 646.9711 JOB 197311 1 BC EPS		

COMMENTAIRES / comments

VAC HARDEN 1800°F - 1:00 HRE
DOUBLE TEMPER 400°F - 2:00 HRS

Heat treatment (HT) was performed with equipment that meets the requirements of requested specification. All HT operations were performed in compliance with the required HT specification and all verifications have been performed and documented. No unauthorized changes were performed in regards to the HT. We certify that the material was manufactured, sampled, tested and inspected in accordance with the material specification and the purchase order and was found to meet the requirements.

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Le traitement thermique (TT) a été fait en utilisant des équipements en conformité avec la spécification demandée. Toutes les opérations de TT ont été faites en conformité avec les requis de la spécification demandée et toutes les vérifications et les tests demandés ont été faites et documentés. Aucun changement n'a été faite par rapport au TT. On certifie que le matériel a été fabriqué, échantillonné, testé et inspecté en accord avec les spécifications du matériel et le bon de commande et le matériel rencontre les exigences spécifiées.

METCOR INC.

560 BOUL. ARTHUR-SAUVÉ, ST-EUSTACHE, QC, J7R 5A8

Tél.: 450-473-1884

Télécopieur / Fax administration: 450-491-5498

Télécopieur / Fax production: 450 491-6454

Certificat de Conformité Détaillé

Detailed Certificate of Compliance

BON DE TRAVAIL order	CHARGEMENT load
338798	1

CLIENT / customer 215

DART AEROSPACE

1270 ABERDEEN

HAWKESBURY

ON K6A 1K7

LIVRÉ À / shipped to:

DART AEROSPACE

1270 ABERDEEN

HAWKESBURY

ON K6A 1K7

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APPROUVÉ par / Approved by:

DATE: 2019-09-06

Lucie Desmarais
QA Technician

